

# **PSCC Demonstration Project**

**PSCC & SIEC Briefing  
November 18, 2008**

- **Demonstration**
- **Project Background**
- **ISSI Description**
- **Kickoff Test**
- **Next Steps**
- **Final Thoughts**

**Bill Phillips**

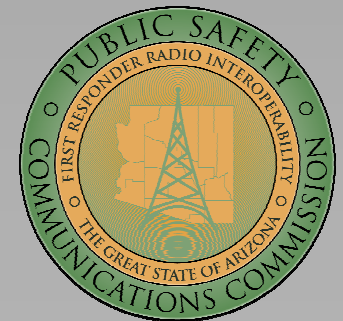
**Phoenix ITS**

**Jesse Cooper**

**Phoenix Police**

# PSCC Demonstration Project Background

- PSCC Approved Objectives
  - Day-to-day interoperability between local, county, state, and tribal public safety responders on a joint use radio system.
  - Use lessons learned to help construct a new statewide radio system (or system of systems) for Arizona.



# PSCC Demonstration Project Background

- PSCC Approved Opportunities
  - Deployment of initial 700 MHz subscriber units in order to be usable for Super Bowl 2008
  - Add 700 MHz trunked system coverage at White Tanks
  - Add 700 MHz trunked system coverage at Oatman Mtn
  - Add an Inter System Interface between YRCS and PRWN / TOPAZ
  - Add 700 MHz radio capability to state agency vehicles working within the expanded coverage area of PRWN/TOPAZ and YRCS



# PSCC Demonstration Project Background

- PSCC Approved Opportunities

Partial

- Deployment of initial 700 MHz subscriber units in order to be usable for Super Bowl 2008

Complete

- Add 700 MHz trunked system coverage at White Tanks - ~ \$775 K authorized, including South Mt connectivity

Complete

- Add 700 MHz trunked system coverage at Oatman Mtn - ~ \$665 K authorized

Complete

- Add an Inter System Interface between YRCS and PRWN / TOPAZ – Provided by Motorola; additional ~ \$485 K for DPS console interfaces and radios

?

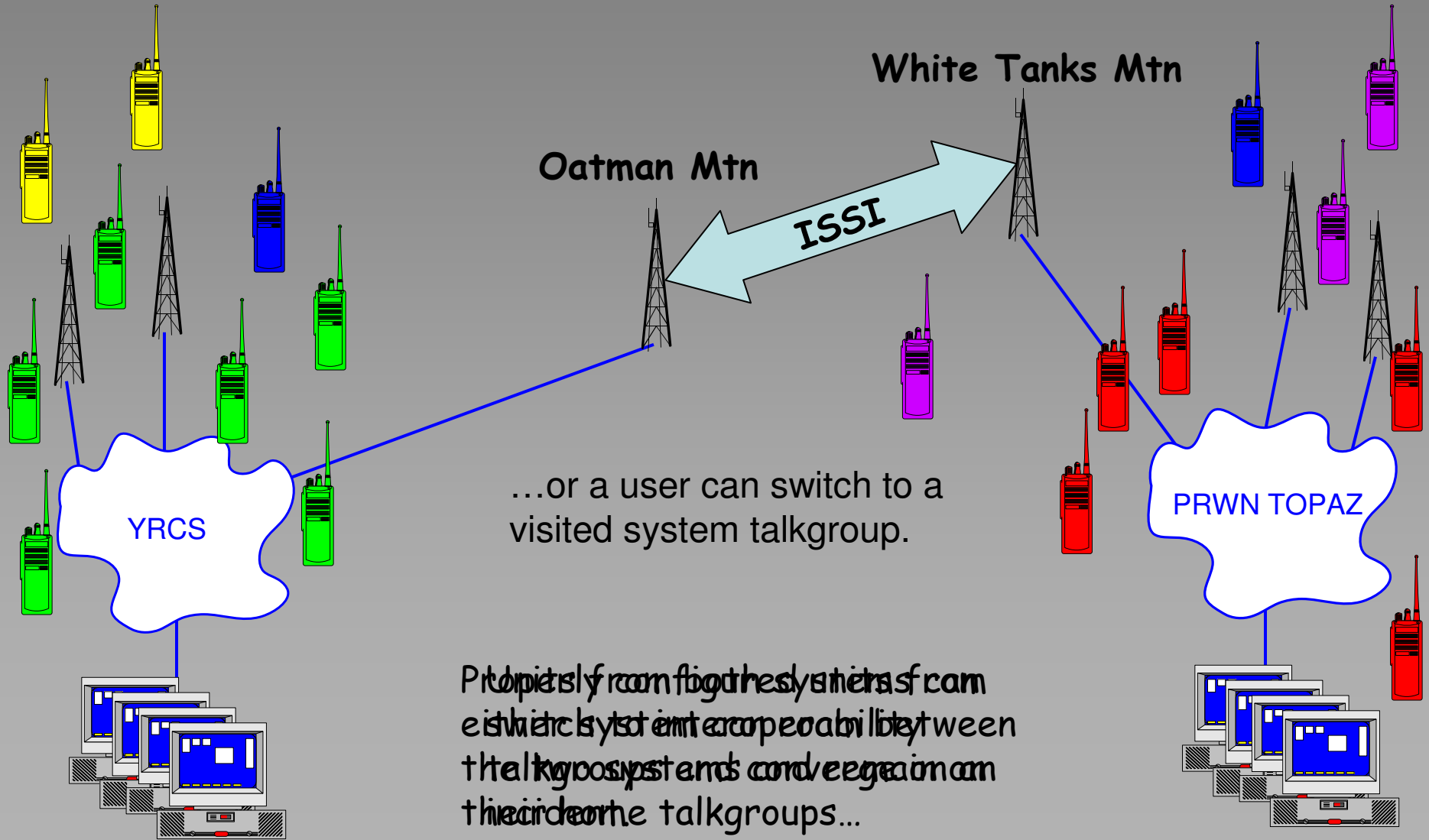
- Add 700 MHz radio capability to state agency vehicles working within the expanded coverage area of PRWN/TOPAZ and YRCS

**Note: Funding approximate only; PSCC records hold actual costs**



# PSCC Demonstration Project

## ISSI Description



# PSCC Demonstration ISSI Description

By adding two new RF sites, coverage area of Yuma and Phoenix/Mesa System expanded to...

Before AzGate, Motorola ASTRO 25 systems were deployed in the Phoenix Metropolitan Area (RWC) and in Yuma County (YRCS)

the user will initiate a mode change on their radio and manually roam into the Phoenix System

White Tanks Mountain

Then, gateways between the two systems were connected at a DPS location in Phoenix using an ISSI, which enabled interoperability between these two systems

Oatman

RWC Zone

YRCS Zone

Now, a public safety responder will be able to stay connected as he travels from Yuma to Phoenix,

Then a digital microwave was between the two sites connectivity between

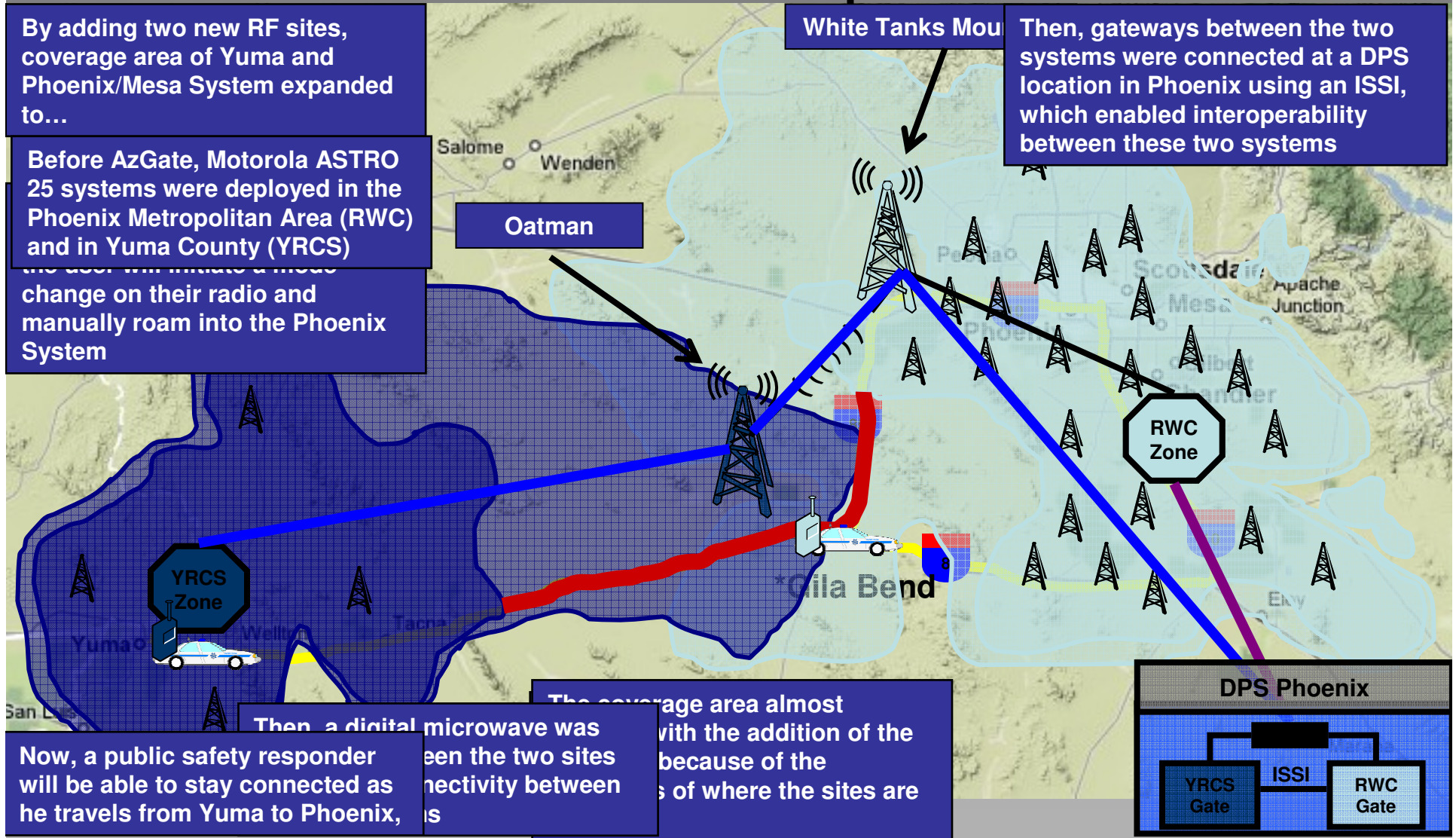
The coverage area almost with the addition of the because of the of where the sites are

DPS Phoenix

YRCS Gate

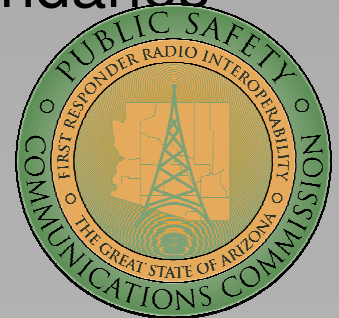
ISSI

RWC Gate



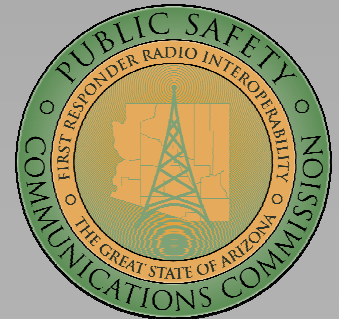
# PSCC Demonstration Project Kickoff Test

- Conducted July 30, 2008
- Participants
  - PSCC, DPS, YRCS, RWC, Motorola
- Objectives
  - Exercise the gateway with as much traffic as possible.
  - Test and experience Audio Quality
  - Test “Collide and Divide” scenario
  - Experience roaming across the systems’ boundaries
  - Focus on the ISSI, “filter out” coverage issues
  - Get feedback and data on the exercise



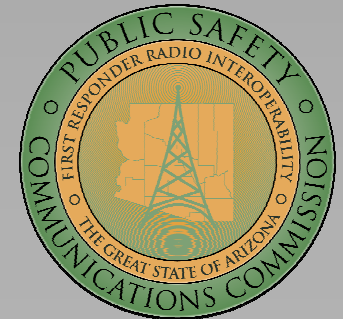
# PSCC Demonstration Project Kickoff Test

- Feedback
  - Worked well, difficult to distinguish where the teams were in each system. We were impressed
  - Surprised the ISSI did not introduce noticeable delay
  - Imperceptible delay difference between the two
  - Even side by side hard to tell
  - Hi fidelity stereo



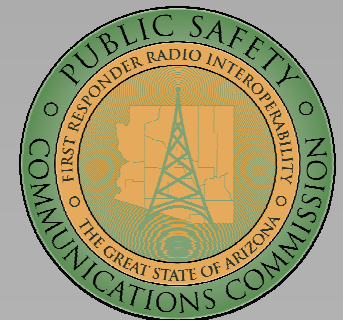
# PSCC Demonstration Project Kickoff Test

- Feedback for final product
  - Mobility management and automatic roaming needs to be high on the list, also Network Management, shared DB, single point of entry for user data.
  - Need more features, PTT ID, aliasing;
  - Must be able to deploy in a manageable fashion, simple programming, updated over network.
  - Gateways may require scenarios which have clear coverage demarcation points.
  - Consider an interoperability system ID.



# PSCC Demonstration Project Kickoff Test

- Feedback for final product
  - Group agrees ISSI not a substitute for shared systems
    - Manual
    - High Overhead
      - Radio programming, multiple personalities, duplicate ID's, system programming, duplicate talkgroups
  - No OTAR across ISSI
  - No ID's across ISSI



# PSSCC Demonstration Project

## Next Steps

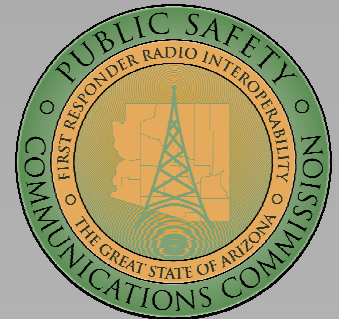
- Identify the project lead
- Work with Motorola to extend the ISSI test period
- Develop Standard Operating Procedures
- Develop and execute exercises
- Provide feedback and lessons learned towards PSSCC goals for statewide interoperability, system or “system of systems” deployment



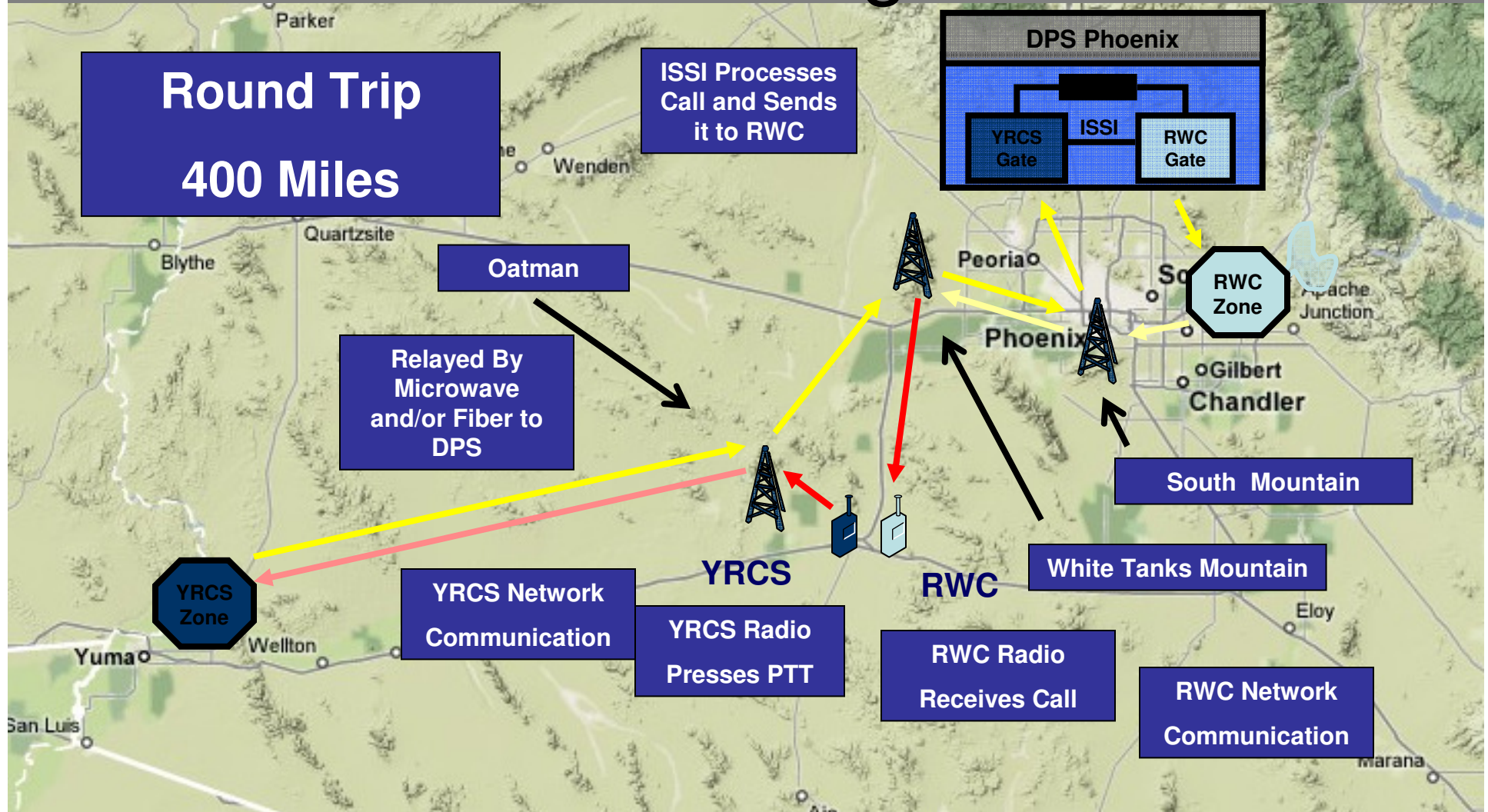
# PSCC Demonstration Project Final Thoughts

- ISSI concept has significant merit
- Testing was very successful
- ISSI has potential for interoperability and “System of Systems” concept

Final parting view of ISSI



# PSCC Demonstration Final Thoughts



# PSCC Demonstration Final Thoughts

**“Space Age”  
Technology  
Is Amazing!**

**Cynthia Cole  
Motorola**

**Jeff Miner  
PSCC**

**6 Feet**

**Gila Bend, AZ**

